Method and Device for Detecting the Signal on a Defect Disc

ABSTRACT OF THE INVENTION

The present invention provides a device for detecting the signal on a defect disc. The device includes a servo control unit, a data path control unit, a defect detection unit, and a logic combination unit. The servo control unit handles the related electromechanical devices. The data path control unit further includes a preamplifier receiving data from a lens and generating RF signals for data process, servo control signals for the servo control unit and various signals for defect detection; a slicer receiving and digitalizing the RF signals; a phase lock loop (PLL) synchronizing the digitalized RF signals to a system clock and counting the length of the digitalized RF signals; and a decoder decoding the length of the digitalized RF signals to a host. The defect detection unit receives the various signals for detecting different kinds of defects to set corresponding defect flag signals. The logic combination unit runs an appropriate logic operation on the defect flag signals to trigger defect protection for the servo control unit and the data path control unit.